**LISTING OF CLAIMS:**

1. (Original) A pressure sensor device comprising:

a diaphragm in which a strain resistance gauge is formed in a surface; and

a stopper member including a concave portion made up of a curved surface parallel to a surface formed by displacement of said diaphragm, said concave portion being disposed so as to face said diaphragm.

2. (Original) The pressure sensor device according to claim 1, wherein stopper members are so disposed as to face both sides of said diaphragm.

3. (Currently amended) The pressure sensor device according to ~~either one of claims 1 and 2~~ claim 1, wherein the curved surface of the concave portion in each of said stopper members is formed into a curved surface in which when the diaphragm has a radius of r, a thickness of t, and a flexural rigidity of D, depth y at a distance x from the center of said diaphragm in relation to operating pressure for protection against maximum pressure p is expressed by a quartic function:

$$y=pr^4(1-x^2/r^2)^2/64D$$

$$D=Et^3/12(1-\nu^2)$$

where E is Young's modulus, and $\nu$ is Poisson's ratio.

4. (Currently amended) The pressure sensor device according to ~~either one of claims 1 and 2~~ claim 1, wherein each of said stopper members has a leading hole of a pressure-transmitting medium to be led to said diaphragm in a top portion of the concave portion forming the curved surface parallel to the surface formed by displacement of said diaphragm.

5. (Original) A pressure sensor device comprising:

a diaphragm in which a strain resistance gauge is formed in a surface;

a pair of stopper members having respective concave portions in the shape of curved surfaces parallel to surfaces formed by displacement of said diaphragm, the stopper members being disposed in both sides of said diaphragm so that said concave portions face said diaphragm; and

a base having fluid paths that lead a pressure-transmitting medium from top portions of said concave portions in said stopper members to both sides of said diaphragm and a pair of pressure-receiving portions connected to said respective fluid paths to transmit pressure to the pressure-transmitting medium injected into said fluid paths.

6. (Original) The pressure sensor device according to claim 5, wherein a sensor chip formed of said diaphragm and said pair of stopper members are fixed to said base with a pressure-absorbing body interposed therebetween.

7. (Original) The pressure sensor device according to claim 5, wherein said pair of pressure-receiving portions is formed of a pair of diaphragms provided to the base.

8. (new) The pressure sensor device according to claim 2, wherein the curved surface of the concave portion in each of said stopper members is formed into a curved surface in which when the diaphragm has a radius of r, a thickness of t, and a flexural rigidity of D, depth y at a distance x from the center of said diaphragm in relation to operating pressure for protection against maximum pressure p is expressed by a quartic function:

$$y=pr^4(1-x^2/r^2)^2/64D$$

$$D=Et^3/12(1-\nu^2)$$

where E is Young's modulus, and $\nu$ is Poisson's ratio.

9. (new) The pressure sensor device according to claim 2, wherein each of said stopper members has a leading hole of a pressure-transmitting medium to be led to said diaphragm in a top portion of the concave portion forming the curved surface parallel to the surface formed by displacement of said diaphragm.